#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493

Bay Area Branch



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003865

Address: 333 Burma Road **Date Inspected:** 07-Sep-2008

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 1430 **OSM Departure Time:** 2000 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Sun Wei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A **Electrode to specification:** Yes No N/A Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A **Approved Drawings:** Yes No N/A **Approved WPS:** Yes No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Orthotropic Box Girder (OBG) and Tower, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item	Description	WBS	Dwg No.	Status
1	U-rib Deck Panel	NA	NA	welding in progress

OBG Bay 1:

Caltrans QA inspector was present to perform magnetic particle (MT) testing at Gantry 1, 1515 hours. Caltrans QA inspector was informed that the testing would be performed on tack welds joining u-ribs to deck plate, prior to the welding of the partial joint penetration (PJP) welds joining the u-ribs to the deck plate. The deck plate is identified as DP595-001 welds 033, 034, 035, 036, 037, 038, 039, 040, 041 and 042. Caltrans QA inspector met with ABF inspectors, Mr. Huang won Guang and Mr. Chang Bao in regard to the status of the deck panel. The ABF inspectors informed Caltrans QA inspector that ZPMC QC had completed MT of the tack welds just prior to Caltrans QA inspectors' arrival. ZPMC moved the welding heads into position and started welding the root weld pass during the time Caltrans QA inspector setting MT equipment to perform testing.

ZPMC QC/CWI inspector, Mr. Sun Wei arrived at the welding station about forty-five minutes later. Caltrans QA inspector informed Mr. Wei that Caltrans was not provided access to the deck panel to perform MT of the tack weld. Mr. Wei stated that he was in the office performing paperwork and was aware that Caltrans was to MT the deck panel tack welds, but had no explanation why ZPMC started welding prior to Caltrans performing MT.

However, Caltrans QA inspector randomly observed ZPMC welders Xu guo Yin ID Number 059443, Chen Jie ID Number 059468, Xianghuan Feng ID Number 059416, Gao Xin dong ID Number 059361 and Jiang Ting Guang ID

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Number 062265, utilizing Gantry 1 mounted welding apparatus with the gas metal arc welding (GMAW)/submerged arc welding (SAW) process in the 2G (Horizontal Groove) position with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2342-U1(U-Rib)-3. Caltrans QA inspector observed ZPMC QC inspector, Mr. Chen Shi gang monitoring weld parameters. The weld parameters appeared to comply with contract requirements. See Caltrans Production Deck Panel Welding record dated September 7, 2008, filed on-site, OSM office, for additional information. The following digital pictures illustrate deck panel welding.





### **Summary of Conversations:**

As identified within the contents of this report.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, 138-1694-2685, who represents the Office of Structural Materials for your project.

Inspected By:	Hasler,Mike	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer